GRAND MEGA PIXEL Wi-Fi

SPILL-RESISTANT CAMERA

User's Manual

ISSUE：Mar 17, 2010

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1. Package Contents

Grand Mega Pixel Wi-Fi Spill-Resistant Camera

Quick Guide

RJ-45 Cable

Power Adapter (DC 5V, 2A)

Mounting Bracket

Mounting Screws

CD Driver

- Grand Mega Pixel Wi-Fi Spill-Resistant Camera
- Quick Guide
- RJ-45 Cable
- Power Adapter (DC 5V, 2A)
- Mounting bracket
- Mounting Screws
- CD Driver with user manual/ software (IP Detect)/ Surveillance software

2. Introduction

Grand Mega Pixel Wi-Fi Spill-Resistant Camera is a full featured network camera that enables you to remote view and listen with your web browser (supports iPhone WEB Browser). The Grand Mega Pixel Wi-Fi Spill-Resistant Camera uses the latest video compression technology that provides clearer and more fluent image transmission. Choose the Grand Mega Pixel Wi-Fi Spill-Resistant Camera to enhance safety and security at your home or office.

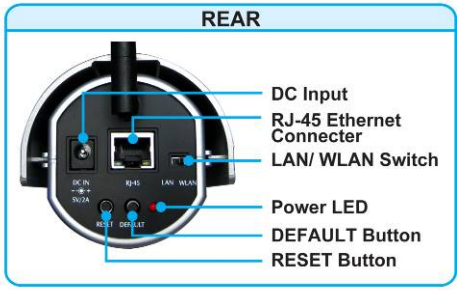
3. System Requirements

- Router (with DDNS or PPPoE function) is required
- 100Base-T Ethernet or 1000Base TX Fast Ethernet
- Processor:
- **IE Remote View:** Intel Pentium4 2.4GHz or higher
- **Surveillance Software:**
  1 channel: Intel Pentium4 2.4GHz or higher
  2~7 channel: Intel Pentium Core 2 Duo 2.4 GHz or higher
  8~16 channel: Intel Pentium Core 2 Quad 2.83 GHz or higher
- RAM: 1GB or higher
- Web browser: Microsoft Internet Explorer V6.0 or higher

4. Product Features

- 1/4” CMOS SXGA Sensor (1.3MegaPixel)
- Built-in High Sensitivity Microphone for remote listening.
- High Resolution Image Processor (160x120/ 320x240/ 640x480/ 1280x1024).
- High Performance Image Compression.
- The provided **IP Detect** tool allows you to quickly search for and set up cameras located in the local area network (supports Windows 7/ Vista/ XP 32bit).
- Supports iPhone Web Browser (in MJPEG format).
- Supports Internet Explorer and Firefox browser for remote viewing on PC.
- Compatible with Windows 7/ Vista/ XP and Linux OS (32bit).
- Supports Motion detected Mail Function
- Supports digital zoom in function.
- 12-LED infrared for night vision.
- Network
  - LAN connector: RJ45 port to connect to 10/100 Mbps Ethernet
  - Wireless: Built-in 802.11g Wi-Fi Module (Grand Mega Pixel Wi-Fi Spill-Resistant Camera)
- Supports TCP/IP / HTTP / FTP / SMTP / DHCP / PPPoE / DDNS / UPnP / NTP service
- Multi-Languages OSD: English / French / Portuguese / German / Italian / Netherland / Spanish/ Russian / Japanese / Traditional Chinese
- The spill-resistant design expands the scope of applications by letting you install the camera under the eaves of house or store.
- Bundle Surveillance Software (supports Windows 7/ Vista/ XP (32bit):
  - Video File Management: Video file database and playback control.
  - Storage Recyclable: When running out of disk space, files with the earliest date will be overwrite automatically.
  - Motion Detection: Detect any movement in the mask area and invoke the alarm as soon as movement is detected.
  - Supports up to 16 cameras remote view and record simultaneously.
    NOTE: When remote view and record 16 cameras simultaneously, a system with higher CPU performance is recommend
  - Multi-Languages OSD: English/ French/ German/ Italian/ Dutch/ Spanish/ Russian/ Japanese/ Traditional Chinese.
  - Supports scheduled recording function.

5. Hardware Overview



- **Default Button:** Reset all settings to the original (factory) setting.
  (Default IP Address: **192.168.1.100**, Default User Name: **root**, Default Password: **admin**)
- **Reset Button:** Press the button to restart the camera.
- **Built-in High Sensitivity Microphone:** For remote listening.
- **System LED:** Steady green indicates a proper connection to the power supply.
- **DC Input:** Connects to the power adapter. (5VDC, 2A)
- **RJ-45 Ethernet Connector:** For connects to 10Base-T Ethernet cabling or 100Base-TX Fast Ethernet cabling.
- **LAN/ WLAN Switch:** Select your network connection Wireless/ RJ-45.

6. Hardware & Software Installation

6.1 Hardware Installation

6.1.1 Assembling the Stand

- Use the three screws and plugs provided to fix the stand bracket to a wall.
- The stand can be adjusted to allow the camera a full 360° of rotation and a pan and tilt action.

6.1.2 Connecting to a Network

- Connect the Mega Pixel Wi-Fi Spill-Resistant Camera to an Ethernet hub or switch by using a standard cable. You can also connect directly to a computer by using the cross-over wire provided.

Works Over Ethernet
(can be connected from anywhere via ethernet)

Can only be connected by the PC

6.2 Software Installation

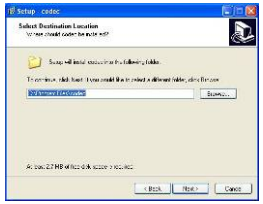
Insert the driver CD into your CD-ROM drive, then the autorun function will start up the shell program. If the autorun window does not display, please execute the Autorun.exe program to bring out the autorun screen.

Grand Mega Pixel Wi-Fi Spill-Resistant Camera V1.00
Grand Mega Pixel Wi-Fi Spill-Resistant Camer
Install Audio and Video Codec
Install Mega Pixel IP Camera Viewer
Install IPCam Setup
Help
Exit CD

Follow the below steps to install the software programs:

Step1: Press the **Install Audio and Video Codec** to install the audio and video codec.

click **Next** to continue



select the installation folder and click **Next** to continue

Select the **DirectX patch** and click **Next** to continue

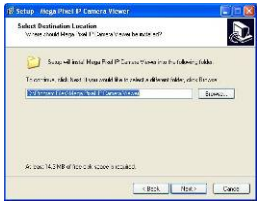
click **Next** to continue

click **Install** to start the installation

click **Finish** to complete the installation

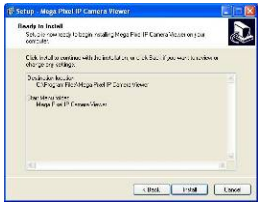
Step2: Press the **Install Mega Pixel IP Camera Viewer** to install the surveillance software.

click **Next** to continue

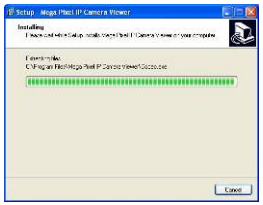


select the installation folder and click **Next** to continue

select the start menu folder and click **Next** to continue



click **Install** to start the installation

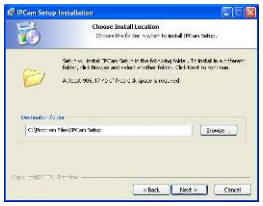


Installing

click **Finish** to complete the installation

Step3: Press the **Install IPCam Setup** to install the **IPCam Setup** program.

click **Next** to continue

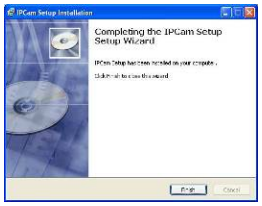


select the installation folder and click **Next** to continue

Create a desktop icon and click **Next** to continue

click **Install** to start the installation

Installing



click **Finish** to complete the installation

Step4: The shortcut icons (**Mega Pixel IP Camera Viewer** and **IPCamSetup**) will be shown on your desktop after installing.

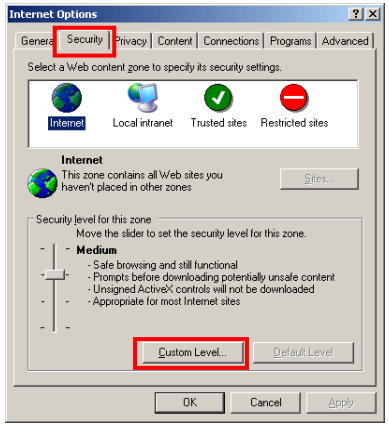
6.3 Internet Browser Settings

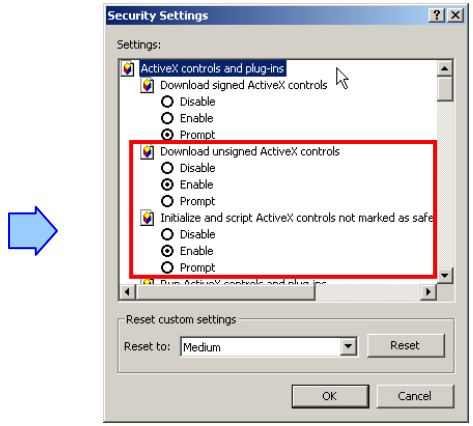
NOTE: Your browser must be enabled the ActiveX for connect to the Mega Pixel Wi-Fi Spill-Resistant Camera first time.

Step 1: Start the internet browser.

Step 2: Click the "**Tools**" at the top of the screen, and select "**Internet Options…**".

Step 3: Select the "**Security**" tab, and click the "**Custom Level**". Set to "**Enable**" or "**Prompt**" on the "**Download unsigned ActiveX controls**" and "**Initialize and script ActiveX controls not marked as safe**" items.

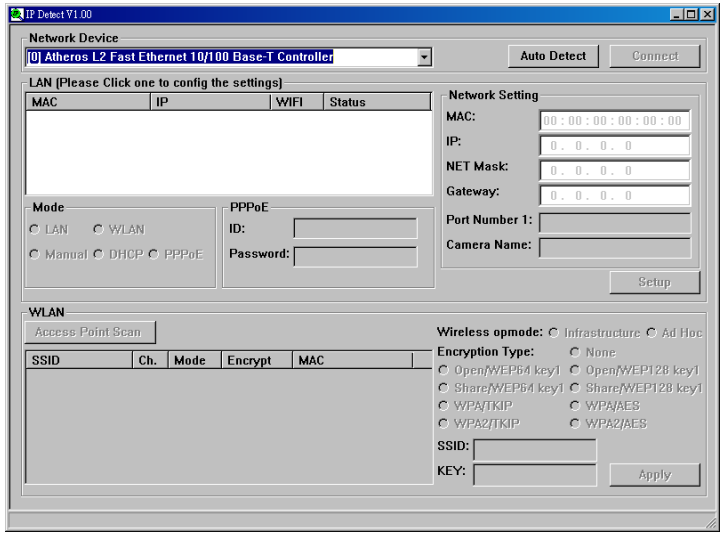




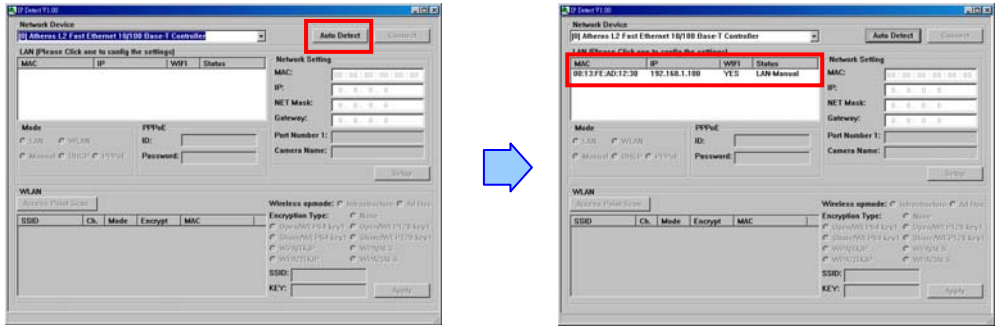
7. Network Installation

7.1 Wired Network Installation

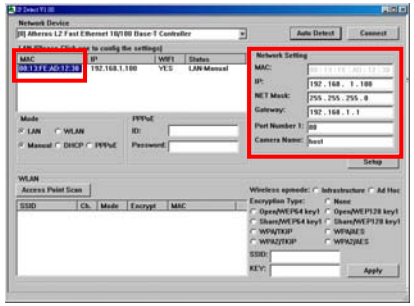
Step 1: Double click on ( ) IPCam Setup's execution file on the desktop, and the following screen will appear.



Step 2: Click the "Auto Detect" button, and your camera's MAC and default IP Address will be listed.

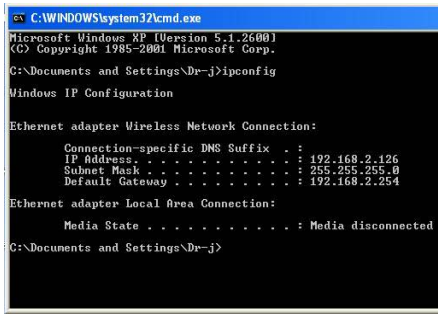


Step 3: Click on the "MAC", and the "IP", "Net Mask", "Gateway", "Port Number 1" and "Camera Name" will be displayed in the "Network Setting" area.



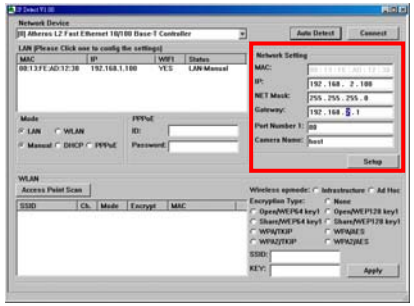
NOTE: The IP Address, Net Mask and Gateway must be corresponding with your network settings for you to access the camera. You can follow the steps below to get your network information.

- Open the Microsoft DOS **Command Prompt** shell window.
  Windows XP/ Vista: <Start> → <Programs> → <Accessories> → <Command Prompt>
  Windows 7: <Start> → <All Programs> → <Accessories> → <Command Prompt>
- Type "ipconfig" and then press "Enter" to get your network information.

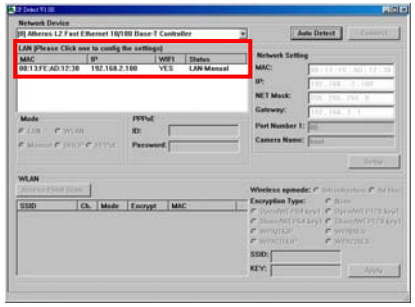

C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.
C:\Documents and Settings\Dr-j>ipconfig
Windows IP Configuration
Ethernet adapter Wireless Network Connection:
Connection-specific DNS Suffix . :
IP Address. . . . . : 192.168.2.126
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.2.254
Ethernet adapter Local Area Connection:
Media State . . . . . : Media disconnected
C:\Documents and Settings\Dr-j>

- Assign IP Address, Netmask (Subnet Mask) and Gateway (Default Gateway) for the Mega Pixel Wi-Fi Spill-Resistant Camera. (You must use the same Net Mask (ex. 255.255.255.0) and Gateway (192.168.2.254). You can use any IP address between 192.168.2.1-254, but make sure that the IP Address has never been used or is used by another IP addressable device.)

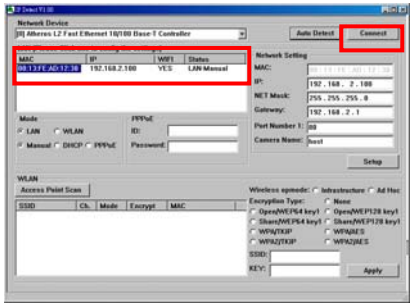
Step 4: Directly modify the "IP", "Net Mask" and "Gateway", and click "Setup" to save.



Step 5: Click the “Auto Detect” button again, and the new network information will be shown.

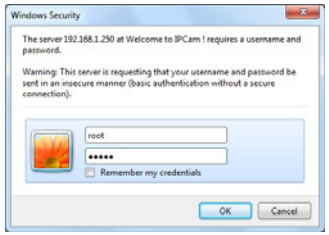


Step 6: Select the “MAC” and click the “Connect” button to connect the Mega Pixel Wi-Fi Spill-Resistant Camera.



Step 7: When the login screen appears, enter the user name and password (default user name: **root**, default password: **admin**), and click the “OK” button to login your camera.

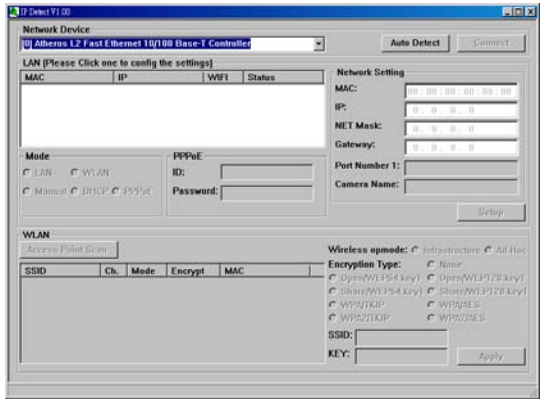
Windows XP/ Vista



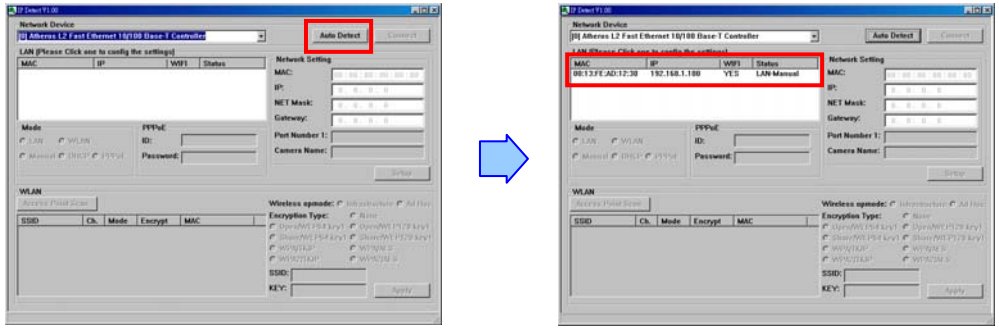
Windows 7

7.2 Wireless Network Installation

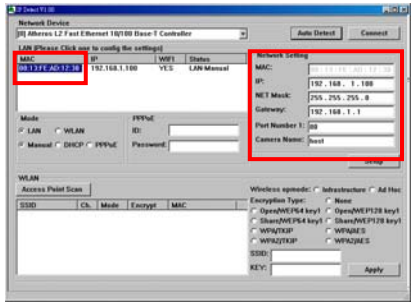
Step 1: Double click on ( ) IPCam Setup’s execution file on the desktop, and the following screen will appear.



Step 2: Connect Mega Pixel Wi-Fi Spill-Resistant Camera to the PC with the crossover cable. Click the “Auto Detect” button specified as below, and your camera’s MAC and default IP Address will be listed.

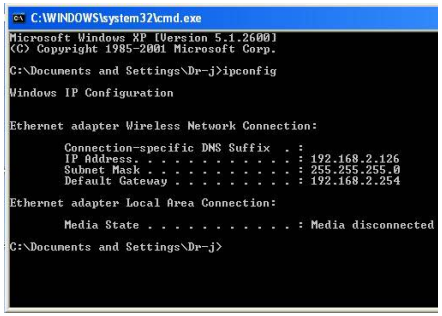


Step 3: Click on the “MAC”, and the “IP”, “Net Mask”, “Gateway”, “Port Number 1” and “Camera Name” will be displayed in the “Network Setting” area.



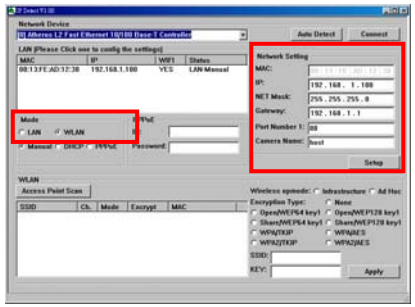
NOTE: The IP Address, Net Mask and Gateway must be corresponding with your network settings for you to access the camera. You can follow the steps below to get your network information.

- Open the Microsoft DOS **Command Prompt** shell window.
  Windows XP/ Vista: <Start> → <Programs> → <Accessories> → <Command Prompt>
  Windows 7: <Start> → <All Programs> → <Accessories> → <Command Prompt>
- Type “ipconfig” and then press “Enter” to get your network information.

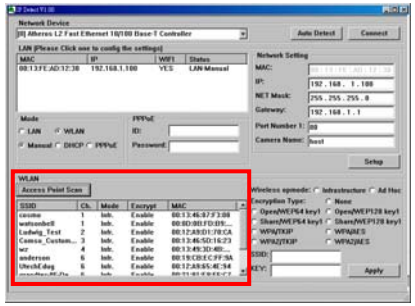

C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.
C:\Documents and Settings\Dr-j>ipconfig
Windows IP Configuration
Ethernet adapter Wireless Network Connection:
Connection-specific DNS Suffix . :
IP Address. . . . . : 192.168.2.126
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.2.254
Ethernet adapter Local Area Connection:
Media State . . . . . : Media disconnected
C:\Documents and Settings\Dr-j>

- Assign IP Address, Netmask (Subnet Mask) and Gateway (Default Gateway) for the Mega Pixel Wi-Fi Spill-Resistant Camera. (You must use the same Net Mask (ex. 255.255.255.0) and Gateway (192.168.2.254). You can use any IP address between 192.168.2.1-254, but make sure that the IP Address has never been used or is used by another IP addressable device.)

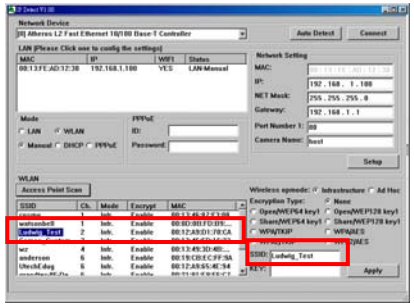
Step 4: Select “WLAN” in the “Mode” selection. Directly modify the “IP”, “Net Mask” and “Gateway”, and click “Setup” to save.



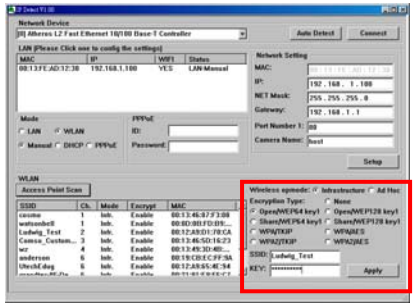
Step 5: Click on the “Access Point Search” button and all available access points will be listed.



Step 6: Select the access point you want to use and the corresponding SSID will show in the “SSID”.

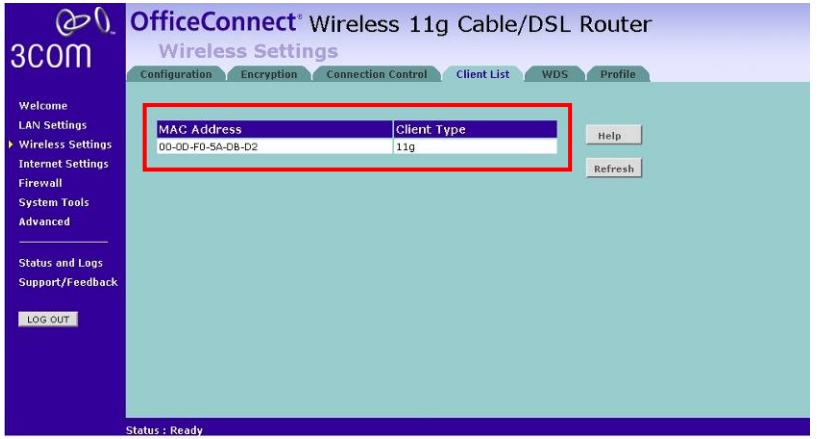


Step 7: Then input your wireless configuration, include “Wireless op mode”, “Encryption Type” and corresponding “Key”. Click on “Apply” button for saving the configuration.

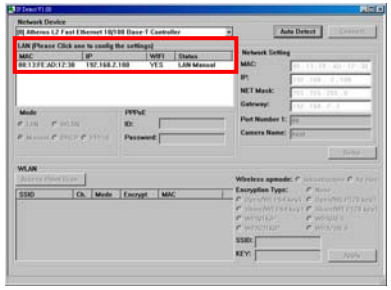


Step 8: Turn off Mega Pixel Wi-Fi Spill-Resistant Camera, unplug the crossover cable, set the “WLAN/LAN” switch to “WLAN”, and then restart Mega Pixel Wi-Fi Spill-Resistant Camera.

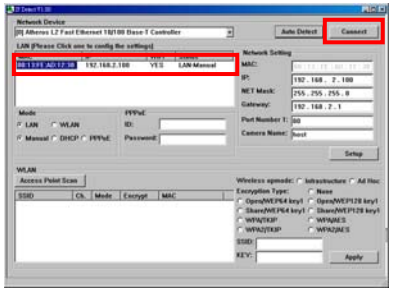
Step 9: Check your access point to see if the configuration works.



Step 10: Click the “Auto Detect” button again, and the new network information will be shown. (For some environment factors, the time consumed by the searching might be very. In a normal situation, it might take about 30~60 seconds for searching your Mega Pixel Wi-Fi Spill-Resistant Camera.)



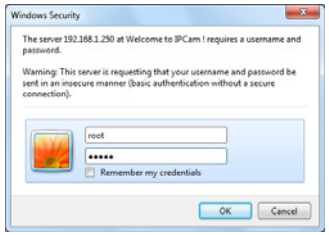
Step 11: Select the “MAC” and click the “Connect” button to connect the Mega Pixel Wi-Fi Spill-Resistant Camera.



Step 12: When the login screen appears, enter the user name and password (default user name: **root**, default password: **admin**), and click the “OK” button to login your camera.

Connect to 192.168.2.100
The server 192.168.2.100 at . requires a username and password.
Warning: This server is requesting that your username and password be sent in an insecure manner (basic authentication without a secure connection).
User name:
Password:
Remember my password
OK
Cancel

Windows XP/ Vista


Windows Security
The server 192.168.1.250 at Welcome to IPCam ! requires a username and password.
Warning: This server is requesting that your username and password be sent in an insecure manner (basic authentication without a secure connection).
root
Remember my credentials
OK
Cancel

Windows 7

8. Using the Build-In Web for Configuration

Mega Pixel Wi-Fi Spill-Resistant Camera provides a way for users to administrate the camera, a build-in web for accessing the video, setting up the video parameter, configuring the network address etc. After login the camera, the page as below will appear. There are two areas in the page: the Menu List and the Main Display area.

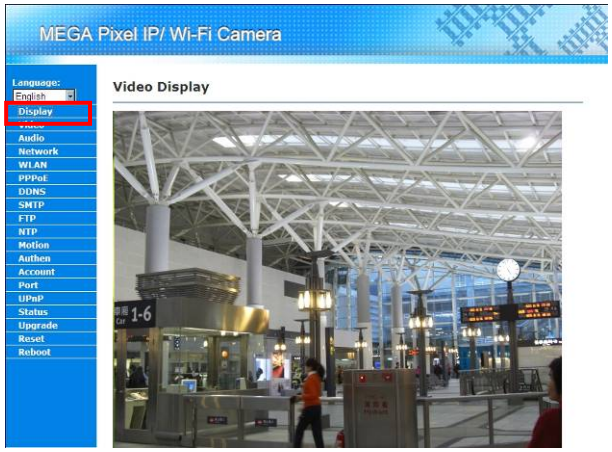
You might access the video stream or select what you want to configure through the Menu List. The video or the details of corresponding configuration will show up in the Main Display area.

8.1 Language Select

You might choose the language used in the build-in web from the draw down list in the top of the Menu List. Mega Pixel Wi-Fi Spill-Resistant Camera supports multi-languages: English, Chinese (Tri), Italian, Russian, French, Japanese, Spanish, Portuguese, Netherlands and German.

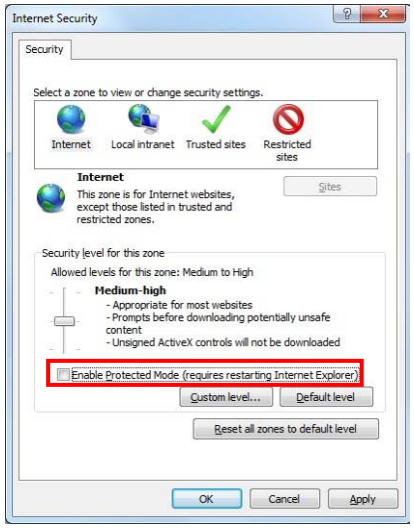
8.2 Display

User can view the video by clicking on the “Display” in the Menu List. The live stream will show up in the Display area.



NOTE: If your camera view shows a black screen, you need to disable the Internet Explorer’s Protect Mode.

Clicks **Tools,** then select **Internet Options.** Click the **Security** tab, and uncheck the box for protected mode, and click Apply. Restart Internet Explorer.

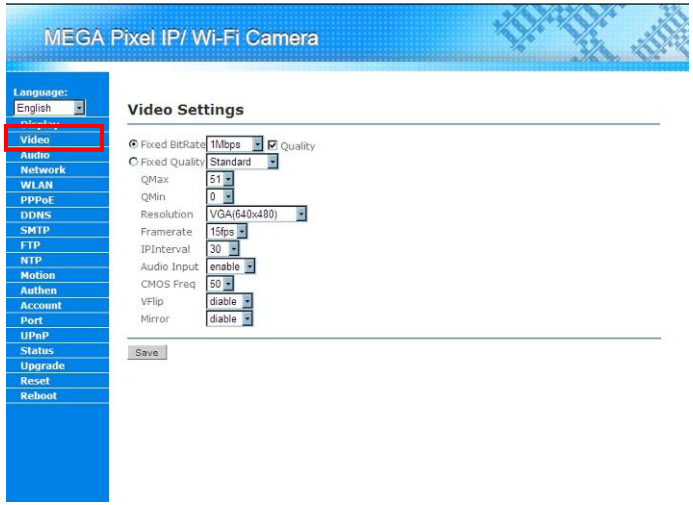


- **Digital Zoom In/ Out Function:** Click left/ right mouse buttons to change the zoom.
  - **Zoom In:** Move your mouse cursor to the video display area, and click left mouse button to zoom in (The screen can be zoomed in 5 steps).
  - **Zoom Out:** Move your mouse cursor to the video display area, and click right mouse button to zoom out.

8.3 Video Settings

User can adjust the parameters of the video stream by clicking on “Video” in the Menu List. The details of video setting should appear in the Main Display area.

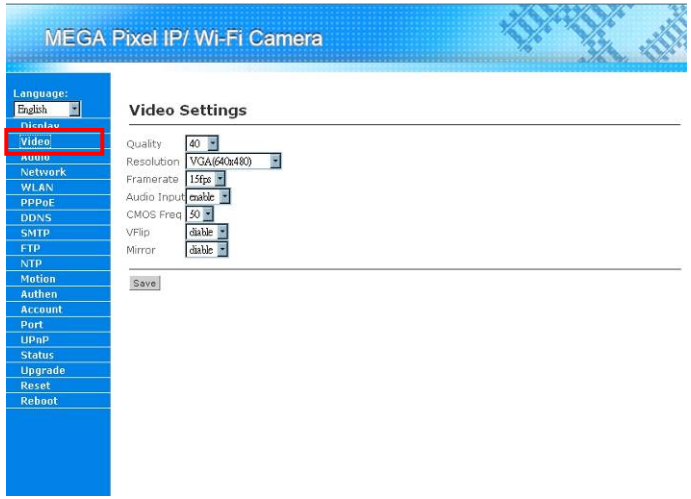
8.3.1 IE User



- **Fixed BitRate:** User might decide the video quality by the bitrates of the video stream. The range of the bitrates is from 16Kbps to 5Mbps.
- **Fixed Quality:** User might decide the video quality by selecting the degree of the video quality. Mega Pixel Wi-Fi Spill-Resistant Camera supports up to 11 degrees of video quality.
- **Quality Checkbox and QMax/Qmin:** If the Quality Checkbox is checked, user might specify a dynamic quality range via QMax/Qmin. The quality range supported by Mega Pixel Wi-Fi Spill-Resistant Camera is from 0 to 51.
- **Resolution:** Select the video resolution. Mega Pixel Wi-Fi Spill-Resistant Camera supports 4 kinds of resolution: 160 x 120, 320 x 240, 640 x 480 and 1280 x 1024.
- **Framerate:** Select the frame rate of the video. The range of frame rate supported by Mega Pixel Wi-Fi Spill-Resistant Camera is from 1 to 30 fps.
- **IPInterval:** Select the interval between two I-Frames in the video stream. The higher this value, the easier the video is vague.
- **Audio Input:** Enable/Disable the audio input of Mega Pixel Wi-Fi Spill-Resistant Camera.
- **CMOS Freq:** Select the frequency of the CMOS sensor. Please accord to the frequency of the power system (50Hz or 60 Hz) to determine this value.
- **Vflip:** Vertically rotate the video.
- **Mirror:** Horizontally rotate the video.
- **Save button:** Save the configuration. All configurations should be available after the configurations are successfully saved.

8.3.2 iPhone User

Mega Pixel Wi-Fi Spill-Resistant Camera supports iPhone's browser, Safari. If user uses an iPhone to access to the Mega Pixel Wi-Fi Spill-Resistant Camera, the Video Setting page should appear as below.



- **Quality:** Select the video quality. The degrees of the video quality supported by Mega Pixel Wi-Fi Spill-Resistant Camera are from 1 to 100.
- **Resolution:** Select the video resolution. Mega Pixel Wi-Fi Spill-Resistant Camera supports 4 kinds of resolution: 160 x 120, 320 x 240, 640 x 480 and 1280 x 1024.
- **Framerate:** Select the frame rate of the video.
- **Audio Input:** Enable/Disable the audio input of Mega Pixel Wi-Fi Spill-Resistant Camera.
- **CMOS Freq:** Select the frequency of the CMOS sensor. Please accord to the frequency of the power system (50Hz or 60 Hz) to determine this value.
- **Vflip:** Vertically rotate the video.
- **Mirror:** Horizontally rotate the video.
- **Save button:** Save the configuration. All configurations should be available after the configurations are successfully saved.

- **View the Camera from iPhone**

Step 1: Assign your IP Camera an IP address and make your IP Camera accessible through the Internet.

Step 2: Connect your iPhone to the network via 3G or Wi-Fi (refer to your user's manual of iPhone for detail about network setting).

Step 3: Open the Web browser (Safari) and enter the URL that you assign to your IP Camera (we use IP in this case). Then the IP Camera will ask you user name (default user name: **root**) and password (default password: **admin**) for authentication.

open the Web browser

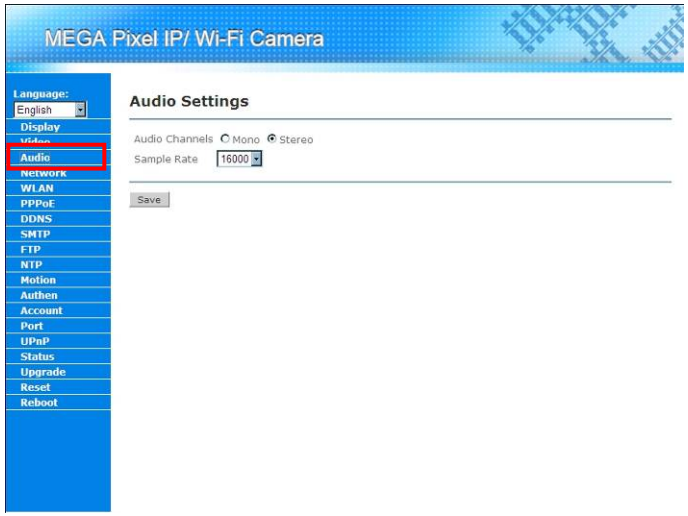
enter the IP adress

enter the user name and password

IP Camera's Web page

8.4 Audio Settings

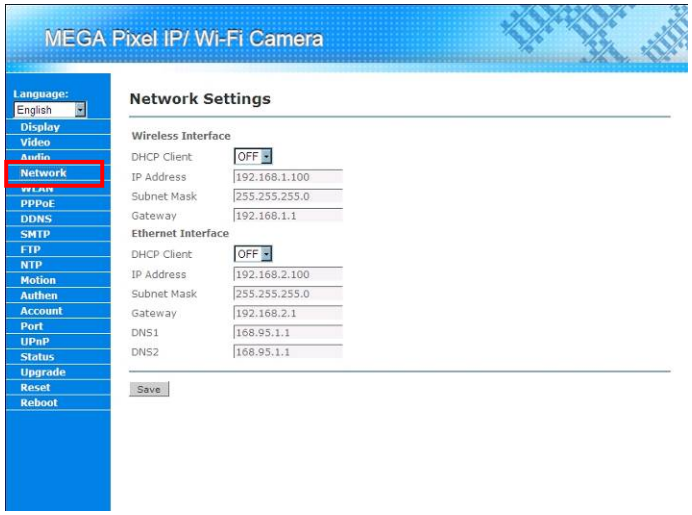
User can adjust the parameters of the audio stream by clicking on “Audio” in the Menu List. The details of audio setting should appear in the Main Display area.



- **Audio Channels:** Select the audio channel. Mega Pixel Wi-Fi Spill-Resistant Camera supports mono and stereo audio.
- **Sample Rate:** Adjust the audio quality by selecting the sample rate of the audio. The sample rates supported by the Mega Pixel Wi-Fi Spill-Resistant Camera are: 16000, 32000 and 48000.
- **Save button:** Save the configuration. All configurations should be available after the configurations are successfully saved.

8.5 Network Settings

User can configure the network setting by clicking the “Network” in the Menu List. The details of network setting should appear in the Main Display area.



- **Wireless Interface:**

  -**DHCP Client:** Enable/Disable the DHCP Client function. If the user wants to use dynamic IP address for Mega Pixel Wi-Fi Spill-Resistant Camera, please select “On” here.

  -**IP Address, Subnet Mask and Gateway:** If the user wants to use a static IP address for Mega Pixel Wi-Fi Spill-Resistant Camera, please enter the IP Address, Subnet Mask and Gateway
- **Ethernet Interface:**

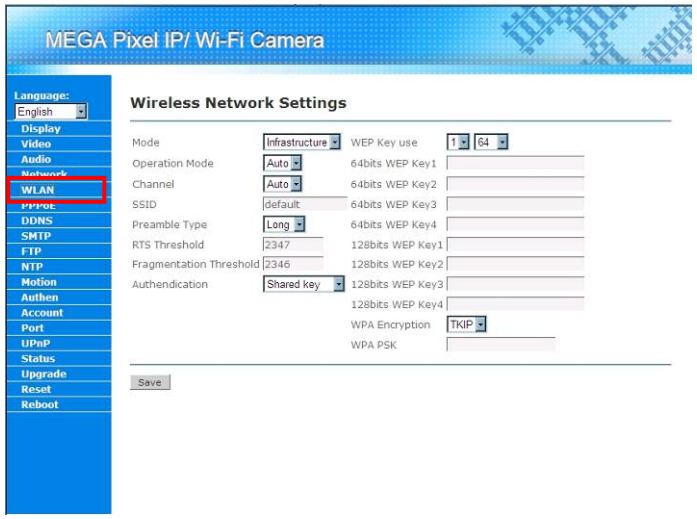
  -**DHCP Client:** Enable/Disable the DHCP Client function. If the user wants to use dynamic IP address for Mega Pixel Wi-Fi Spill-Resistant Camera, please select “On” here.

  -**IP Address, Subnet Mask and Gateway:** If the user wants to use a static IP address for Mega Pixel Wi-Fi Spill-Resistant Camera, please enter the IP Address, Subnet Mask and Gateway

  -DNS Settings: Enter the DNS servers to Mega Pixel Wi-Fi Spill-Resistant Camera for name resolution.
- **Save button:** Save the configuration. All configurations should be available after the configurations are successfully saved.

8.6 Wireless Network Settings

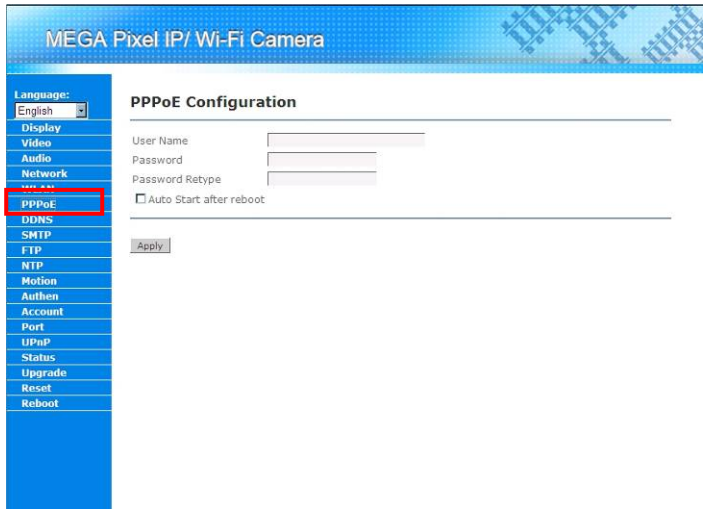
Mega Pixel Wi-Fi Spill-Resistant Camera supports 802.11b/g wireless network. User might configure the wireless setting by clicking on “WLAN” in the Menu List. The details of network setting should appear in the Main Display area. Please note, if the user wants to user the wireless network, he should turn the WLAN/LAN switch to the WLAN side.



- **Mode:** Select the wireless connection mode, whether Infrastructure or Ad-Hoc.
  -**AD-Hoc:** If the user wants to use a wireless peer-to-peer connection, please select “Ad-Hoc”.
  -**Infrastructure:** If the user wants to connect Mega Pixel Wi-Fi Spill-Resistant Camera with a wireless access point, please choose “Infrastructure”.
- **Operation Mode:** Select the protocol that Mega Pixel Wi-Fi Spill-Resistant Camera uses in the wireless network. Mega Pixel Wi-Fi Spill-Resistant Camera supports 802.11b/g protocol.
- **Channel:** Select the RF channel used in the wireless network.
- **SSID:** Enter the SSID of the wireless network.
- **Preamble Type:** Select the type of preamble. The default value is long.
- **RTS Threshold:** Set the RTS threshold. The default value is 2347.
- **Fragmentation Threshold:** Set the Fragmentation Threshold. The default value is 2346.
- **Authentication:** Select the authentication method used in the wireless network. Mega Pixel Wi-Fi Spill-Resistant Camera supports Open System, Share Key, WPA-PSK and WPA2-PSK authentication methods.
- **WEP Key Setting:** Mega Pixel Wi-Fi Spill-Resistant Camera supports 64bit and 128bit WEP encryption. Please configure the WEP parameters according to the user’s wireless network.
- **WPA Encryption:** Mega Pixel Wi-Fi Spill-Resistant Camera supports TKIP and AES encryption for WPA enabled wireless network. Please configure this value according to the wireless network.
- **WPA PSK:** If the WPA-PSK, WPA2-PSK is enabled, please enter the key according to the wireless network.
- **Save button:** Save the configuration. All configurations should be available after the configurations are successfully saved.

8.7 PPPoE Configuration

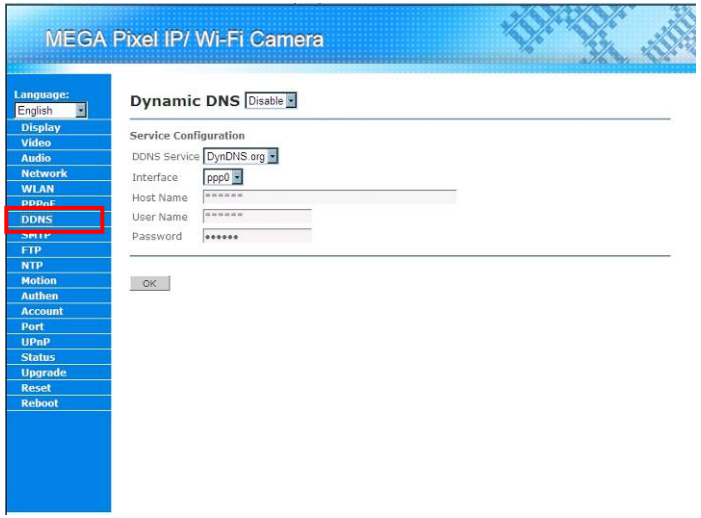
Mega Pixel Wi-Fi Spill-Resistant Camera supports PPPoE dial-up function that let it directly connect to the Internet through a DSL modem. Please click on the “PPPoE” in the Menu List for further setup.



- **PPPoE User/Password:** User might enter the PPPoE user name and password here.
- **Auto start after reboot:** If this function is selected, the PPPoE function will auto start after the Mega Pixel Wi-Fi Spill-Resistant Camera reboot.
- **Apply button:** Apply the configuration. All configurations should be available after the configurations are successfully saved.

8.8 Dynamic DNS

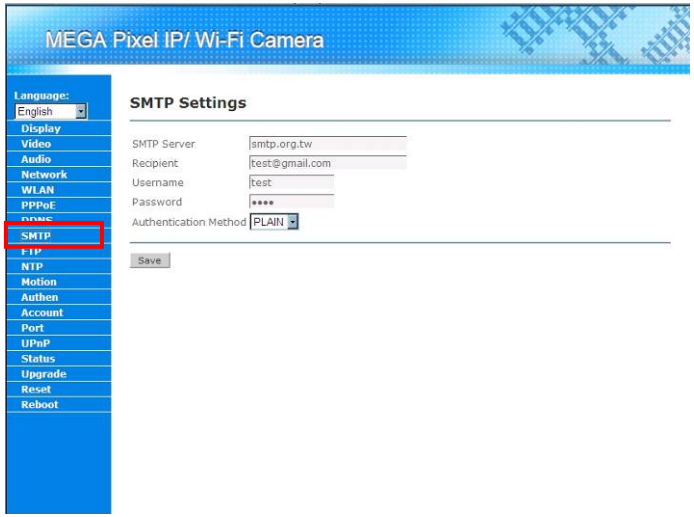
Dynamic DNS is a network service that provides the domain name resolution for dynamic IP address. After creating an alias on the service provider's web site, user might use this alias to access Mega Pixel Wi-Fi Spill-Resistant Camera on the Internet. For further configure this function, please click on the "DDNS" in the Menu List.



- **Dynamic DNS:** Enable/Disable: Enable/Disable the DDNS function.
- **DDNS Service:** Select the DDNS service provider the user wanted to use.
- **Interface:** Select the network interface for registering. If Mega Pixel Wi-Fi Spill-Resistant Camera connects to the Internet via a PPPoE connect, please use the ppp0 interface.
- **Host Name:** In put the host name (alias) that the user creates on the service provider's web site.
- **User Name/Password:** Enter the account information for login the DDNS service.
- **OK button:** Press "OK" button for apply the configurations.

8.9 SMTP Settings

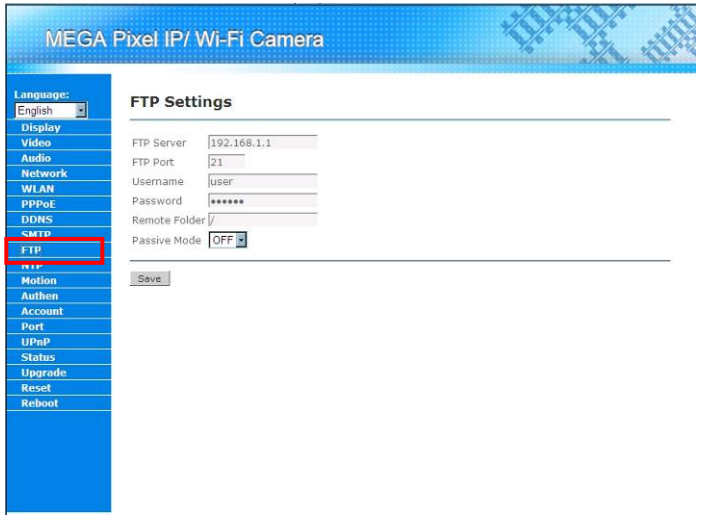
Mega Pixel Wi-Fi Spill-Resistant Camera supports a build-in SMTP client for sending alarm e-mail. When the motion detection function (see 8.12, Motion Detection Settings) is enabled, user might choose to receive alarm e-mail when motion is detected. Please click on "SMTP" in the Menu List for further configuration.



- **SMTP Server:** Enter the mail server's address that the user wants to use for sending e-mails.
- **Recipient:** Enter the e-mail address for receiving the alarm e-mail.
- **Username/Password:** Enter the account information for logging in the mail server.
- **Authentication Method:** Select the authentication method for the delivering e-mail account.
- **Save button:** Save the configuration. All configurations should be available after the configurations are successfully saved.

8.10 FTP Settings

Mega Pixel Wi-Fi Spill-Resistant Camera supports a build-in FTP client for uploading image or video. When the motion detection function (see 8.12, Motion Detection Settings) is enabled, user might choose to upload video or image when motion is detected. Please click on “FTP” in the Menu List for further configuration.



- **FTP Server:** Enter the FTP server’s address that the user wants to use for uploading files.
- **FTP Port:** Enter the FTP port number. The default port used in FTP is 21.
- **User Name/Password:** Enter the account information for logging in the FTP server.
- **Remote Folder:** Enter the remote folder on the FTP server for uploading files.
- **Passive Mode:** If the FTP server supports passive mode, user might enable this function for utilizing this mode.
- **Save button:** Save the configuration. All configurations should be available after the configurations are successfully saved.

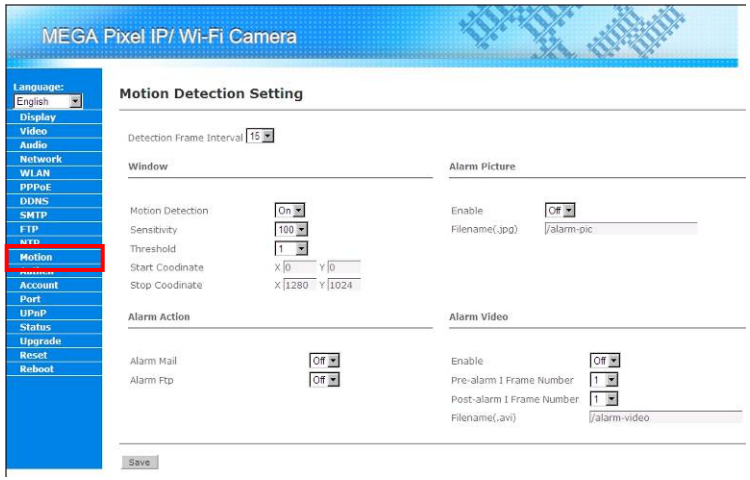
8.11 Date and Time Settings

User could click on the “NTP” in the Menu List for configuring the time of Mega Pixel Wi-Fi Spill-Resistant Camera.

- **Synchronized with Time Server:** Use a NTP server to configure the time of Mega Pixel Wi-Fi Spill-Resistant Camera
  -**NTP Server:** Enter the NTP server the user wants to use.
  -**Time Zone:** Enter the Time Zone in which Mega Pixel Wi-Fi Spill-Resistant Camera is located.
- **Manual Update:** Configure the time of Mega Pixel Wi-Fi Spill-Resistant Camera manually.
  -**Date:** Specify the date here.
  -**Time:** Specify the time here.
- **Synchronized with PC:** When this function been selected, Mega Pixel Wi-Fi Spill-Resistant Camera will synchronize its time with the PC that is browsing it.
- **Save button:** Save and apply the configuration.

8.12 Motion Detection Settings

Mega Pixel Wi-Fi Spill-Resistant Camera supports the motion detection function. When this function is enabled, Mega Pixel Wi-Fi Spill-Resistant Camera will monitor the video captured by it. And Mega Pixel Wi-Fi Spill-Resistant Camera will send alarm e-mail with image/video or upload the image/video to a FTP server when some object moves in the video.



- **Detect Frame Interval:** Define the detection frame interval here.
- **Window:** Define the detection area which needs to be monitored in the video. User could draw this area by using the x and y coordinates.

  -**Motion Detection On/Off:** Enable/Disable this detection area. The lower this value, the easier the motion detection is triggered.

  -**Sensitivity:** Defines a value of the changes. It compares the last image and the current image and counts changes. A small value means more sensitivity.

  -**Threshold**: Set the threshold of the motion detection function.

  -**Start/Stop Coordinate:** Using the X, Y coordinate to draw the scope of the detection area.
- **Alarm Picture:** Configuring the alarm picture here. The pictures will be sent with the alarm e-mail or upload to the FTP server when motion is detected.

  -**Enable:** Enable/Disable the alarm picture function.

  -**Filename:** Set the name of the pictures sent along with the e-mail or uploaded to the FTP server.
- **Alarm Video:** Configuring the alarm video here. The video clips will be sent with the alarm e-mail or upload to the FTP server when motion is detected.

  -**Enable:** Enable/Disable the alarm video function.

  -**Pre-Alarm I Frame Number:** Set the I frame number the user wants to capture before the motion happened.

  -**Post-Alarm I Frame Number:** Set the I frame number the user wants to capture after the motion happened.

  -**Filename:** Set the name of the video clips sent along with the e-mail or uploaded to the FTP server.

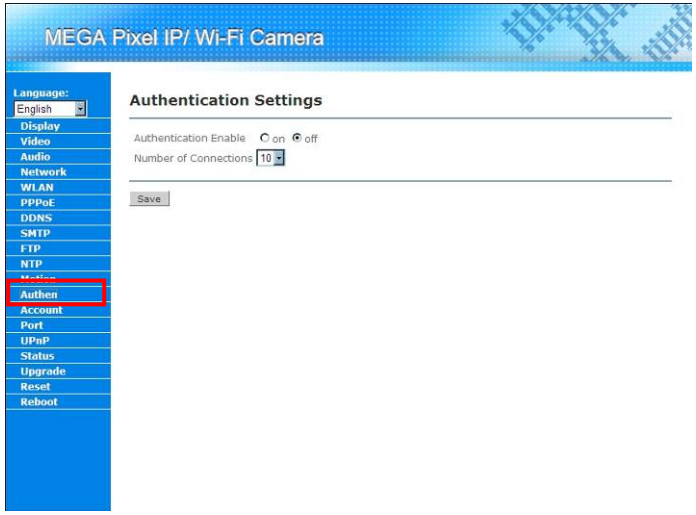
- **Alarm Action:** Enable/Disable the Mail/FTP upload function.

  -**Alarm Mail:** Enable/Disable the alarm e-mail function. Before enabling this function, please configure the SMTP configuration first. (refer to section 8.9)

  -**Alarm Ftp:** Enable/Disable the FTP upload function. Before enabling this function, please configure the FTP configuration first. (refer to section 8.10)
- **Save button:** Save and apply the configuration.

8.13 Authentication Settings

Mega Pixel Wi-Fi Spill-Resistant Camera provides video stream authentication. If this function is enabled, users need to be authenticated for accessing the video stream. For further configure this function, please click on the “Authen” in the Menu List.



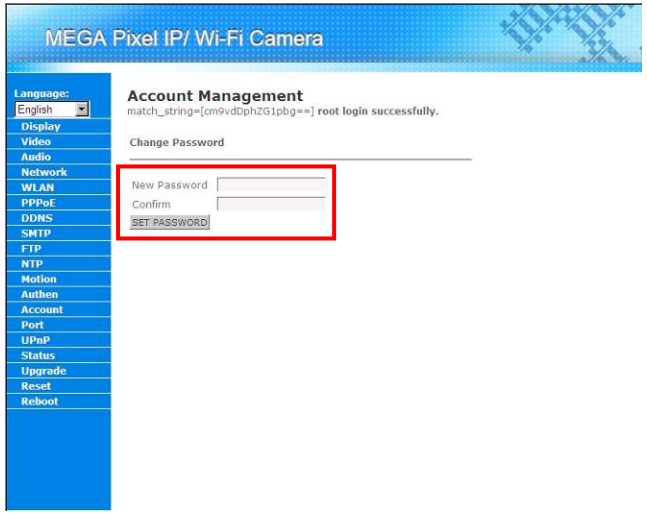
- **Authentication On/Off:** Enable/Disable video authentication.
- **Number of Connections:** User might specify the maxima of connections here. Mega Pixel Wi-Fi Spill-Resistant Camera could support up to 20 connections simultaneously.
- **Save button:** Save and apply the configuration.

8.14 Account Management

User could change the password of the root account through the Account Management. Click on “Account” in the Menu List and follow the steps below for changing the password:

Step 1: Enter the user name and current password twice. Then press the “OK” button for getting into the “Change Password” page.

Step 2: Enter the new password twice. And then press “SET PASSWORD” button for changing the password.



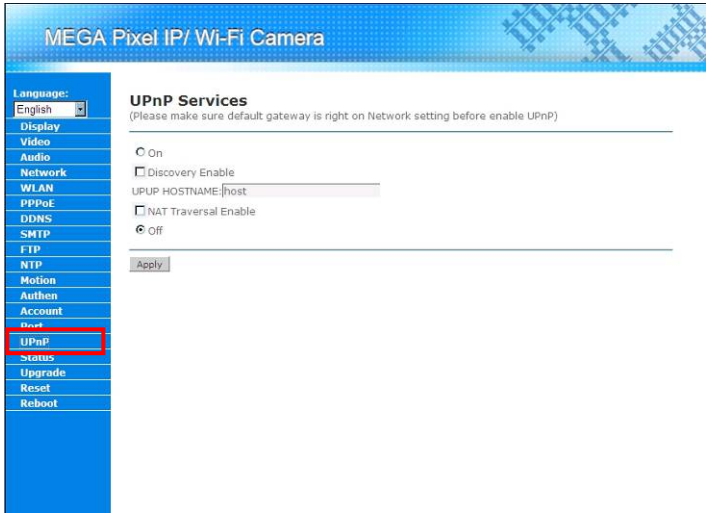
8.15 Port Settings

User could change the port number that used by the video stream. The video stream utilizes the RTP/RTSP protocol for delivering through the network. Click on “Port” in the Menu List for further settings.

- **RTSP Port:** Specify the port number the user wants to use for RTSP. The default port is 554.
- **Control Port:** Specify the control port the user wants to use for sending controlling message to Mega Pixel Wi-Fi Spill-Resistant Camera. The default port number is 21.
- **RTP Range Low/High:** User might specify the range of the random port that used by RTP protocol. The default range is from 50000 to 60000.
- **HTTP Port:** User might change the default port used by HTTP protocol here. The default port number is 80.
- **RTSP Over:** Select the transferring protocol from **AUTO**, **UDP** or **TCP**.
- **Save button:** Save and apply the configuration.

8.16 UPnP Services

Mega Pixel Wi-Fi Spill-Resistant Camera supports UPnP function. Using this function, user could find Mega Pixel Wi-Fi Spill-Resistant Camera by just one click on “My Network Place” (Windows XP and later version). For further setting the UpnP function, please click on the “UPnP” on the Menu List.



- **ON:** Enable the UPnP function.
- **Discovery Enable:** If this function is checked, a Windows user could find Mega Pixel Wi-Fi Spill-Resistant Camera in the My Network Place. About how to enable the UPnP function in the Windows, please refer to “Section 10 Using UPnP to Connect to the Camera”
- **UPNP HOSTNAME:** Specify the host name for the UPnP function here.
- **NAT Traversal Enable:** Enable/Disable NAT Traversal function. If Mega Pixel Wi-Fi Spill-Resistant Camera is located behind a router (uses a NAT network technology), and the router supports NAT Traversal function, user might enable Mega Pixel Wi-Fi Spill-Resistant Camera to negotiate with the router about the port configuration via this function.
- **Off:** Disable the UPnP function.

8.17 Video Connection Status

User could view the video connection status of Mega Pixel Wi-Fi Spill-Resistant Camera by clicking on the “Status” in the Menu List.

8.18 Firmware Update

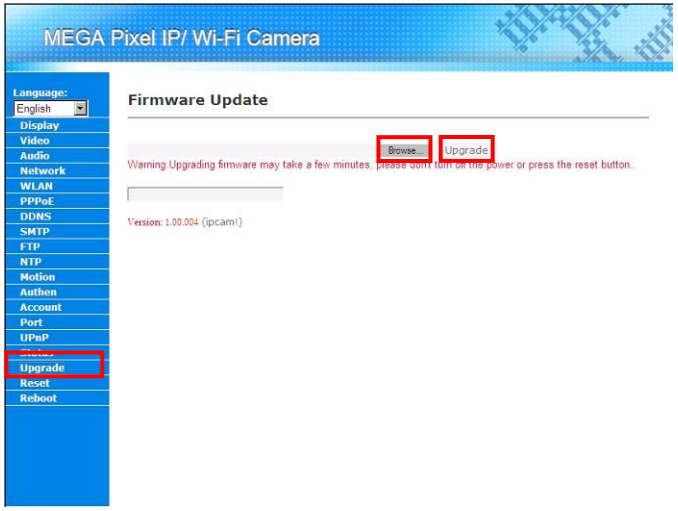
User could update the firmware of Mega Pixel Wi-Fi Spill-Resistant Camera when upgrade is needed. Please follow the steps below for updating your firmware.

Step 1: Get the new firmware and save it in the hard disk.

Step 2: Log in the Mega Pixel Wi-Fi Spill-Resistant Camera. Click on the “Upgrade” in the Menu List.

Step 3: Click on the “Browser” button in the Main Display area and a dialogue box will pop up for the user to choose the new firmware file (the file saved in Step 1).

Step 4: Click on “Upgrade” button for starting the upgrade process.



NOTE: The upgrading process **should not** be interrupted, that is user should not turn off the power of or reset the Mega Pixel Wi-Fi Spill-Resistant Camera when upgrading, for that will cause a hardware damage of Mega Pixel Wi-Fi Spill-Resistant Camera.

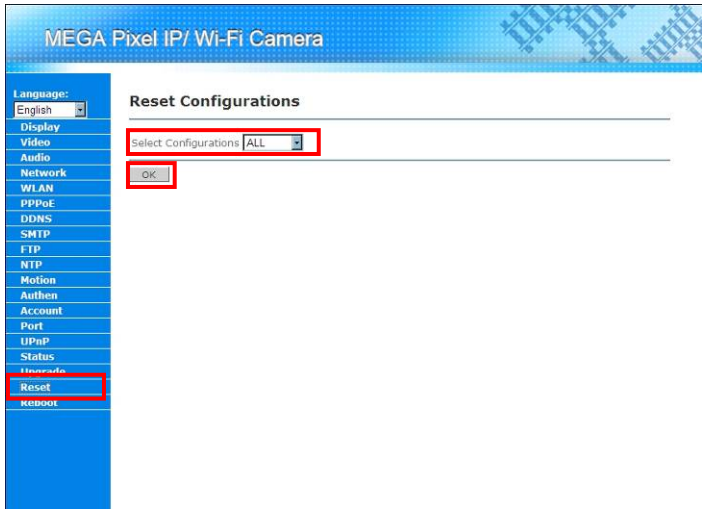
8.19 Reset Configuration

User could reset the configuration of Mega Pixel Wi-Fi Spill-Resistant Camera. Please follow the step for resetting the camera.

Step 1: Log in Mega Pixel Wi-Fi Spill-Resistant Camera and click on the “Reset” button in the Menu List.

Step 2: Select which kind of configuration or “ALL” for all configurations to reset.

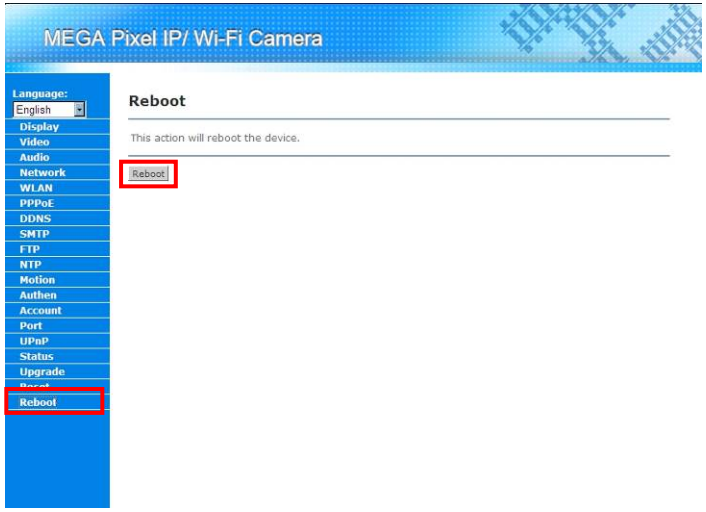
Step 3: Click on “OK” button for resetting the configuration.



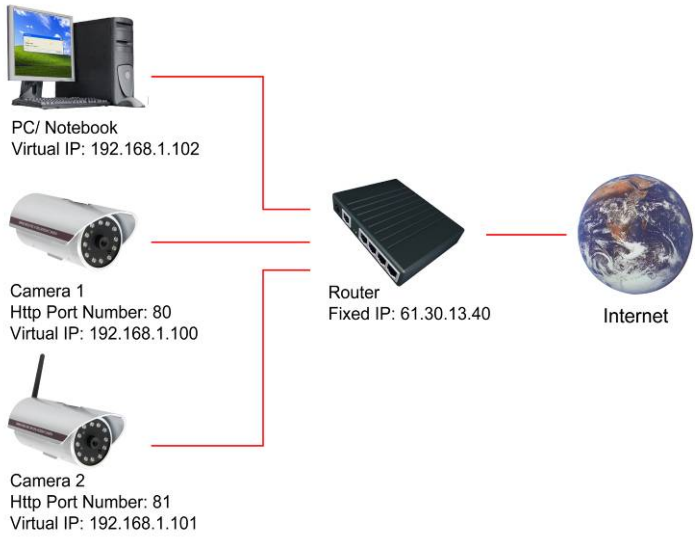
8.20 Reboot the Camera

User could reboot Mega Pixel Wi-Fi Spill-Resistant Camera via the browser. Please follow the steps below for rebooting the camera.

Step 1: Log in Mega Pixel Wi-Fi Spill-Resistant Camera and click on the “Reboot” in the Menu List.
Step 2: Click on the “Reboot” button in the Main Display area for rebooting the camera.



9. Connecting Multiple Cameras to a Router



Step 1: Assign a local IP Address and Http Ports for your cameras (confirm the cameras settings corresponding to your network settings; you must use the same gateway and Subnet Mask).

Step 2: Set up the router to open the ports of cameras for remote access the cameras via internet (refer to your router’s user manual for how to open up ports).

Step 3: Accessing your cameras.

- Access on local network

Enter “http:// 192.168.1.100” to access the camera 1;

Enter “http:// 192.168.1.101” to access the camera 2.

- Access from the internet

Enter “http:// 61.30.13.40:80” to access the camera 1;

Enter “http:// 61.30.13.40:81” to access the camera 2.

10. Using UPnP to Connect to the Camera

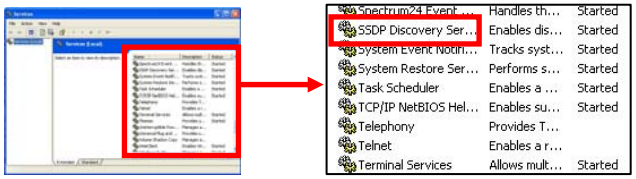
- Confirm the UPnP function of the video sever has been enabled (refer to section 8.16).
- Follow the steps below to enable SSDP and UPnP in Windows XP/ Vista/ 7.

Step1: Open the **Services** window.

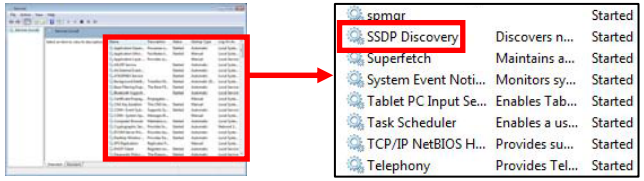
Windows XP/ Vista: “Start” → “Setting” → “Control Panel” → “Administrative Tools” → “Services”.

Windows 7: “Start” → “Control Panel” → “Administrative Tools” → “Services”.

Step2: In the **Services** window, double-click the service **SSDP Discovery**.

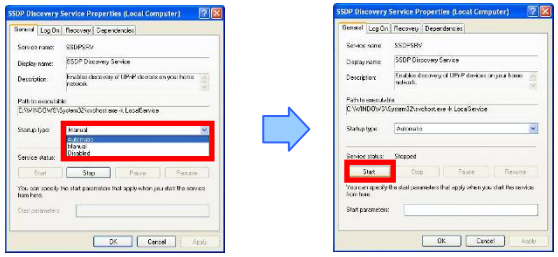

SSDP Discovery Ser... Enables dis... Started
System Event Notifi... Tracks syst... Started
System Restore Ser... Performs s... Started
Task Scheduler Enables a ... Started
TCP/IP NetBIOS Hel... Enables su... Started
Telephony Provides T...
Telnet Enables a r...
Terminal Services Allows mult... Started

Windows XP

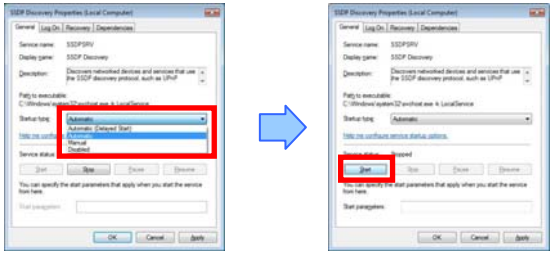

spmgr Started
SSDP Discovery Discovers n... Started
Superfetch Maintains a... Started
System Event Noti... Monitors sy... Started
Tablet PC Input Se... Enables Tab... Started
Task Scheduler Enables a us... Started
TCP/IP NetBIOS H... Provides su... Started
Telephony Provides Tel... Started

Windows Vista/ 7

Step3: Select **Automatic** in the **Startup type** item, and click **Start** to enable the service.

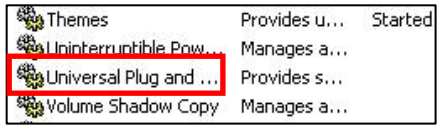


Windows XP



Windows Vista/ 7

Step4: Repeat the step2 and step3 to start the **Universal Plug and Play Device Host** (Windows XP) or **UPnP Device Host** (Windows Vista/ 7) service.

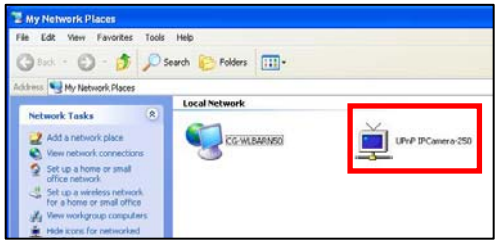


Windows XP

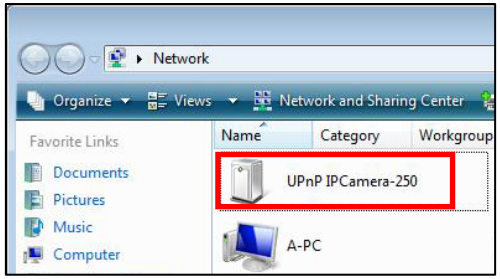
Trusted Platform ... The Trusted... Started
UPnP Device Host Allows UPn... Started
User Profile Service This service ... Started
Virtual Disk Provides m...
Volume Shadow C... Manages an...

Windows Vista/ 7

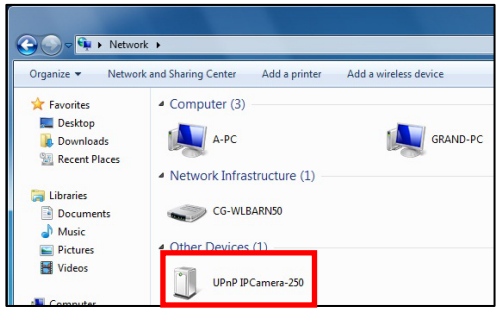
Step5: Open the **My Network Places** (Windows XP) or **Network** (Windows Vista/ 7) on the desktop, click the “**host**” to connect the video server directly. (The **host** is the default UPnP host name)



Windows XP



Windows Vista

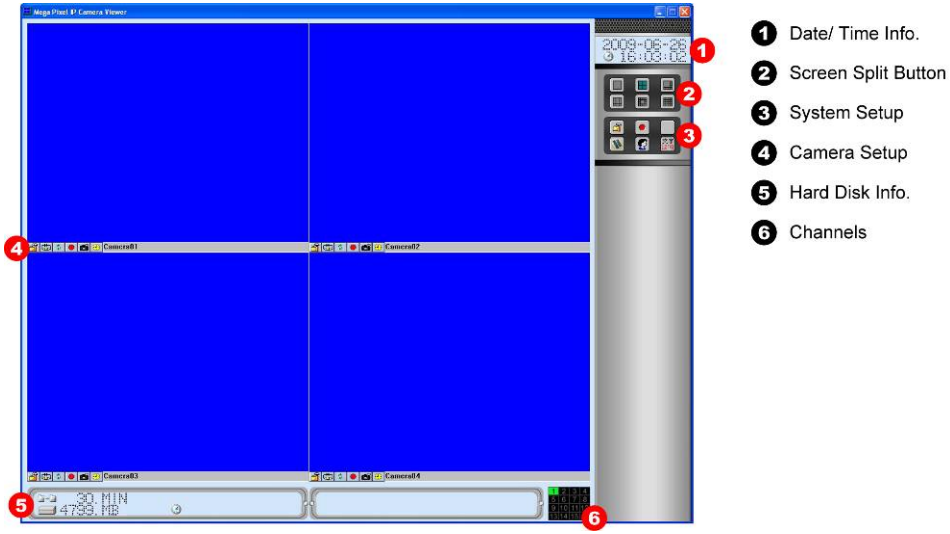


Windows 7

11. Surveillance Software

11.1 Using the Mega Pixel IP Camera Viewer

Double click on ( ) Mega Pixel IP Camera Viewer's execution file on Windows **Desktop** or in the Mega Pixel IP Camera Viewer folder of the **Start menu**. When the program is executed, the following screen will appear (refer to section **6.2 Software Installation**).



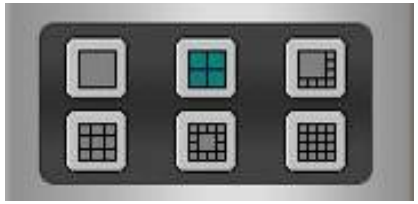
1. Date/ Time Info.
2. Screen Split Button
3. System Setup
4. Camera Setup
5. Hard Disk Info.
6. Channels

11.1.1 Date/ Time Info.

Display local date and time.

11.1.2 Screen Split Button

Selects screen layout for viewing live video from multiple cameras: 1/ 4/ 8/ 9/ 13/ 16.

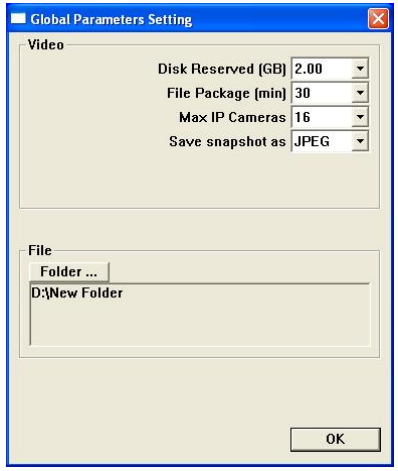


11.1.3 System Setup

System Setup include: **Global Parameters**, **Record All Channels**, **Account Manager**, **Login** and **Language**.

11.1.3.1 Global Parameters Setting

Press the button and the **Global Parameters Setting** window will be displayed.



(1) Video

- Disk Reserved (GB): Set the free space reserved in each HDD.
- File Package (min): To separate the recording file by minutes (30 as default).
- Device Max: The maximum devices supported from 1 to 16 up to the device installed.
- Save snapshot as: Select the snapshots in BMP or JPEG format.

(2) File

- Press the **Folder…** button to select the folder which stores the snapshots or recording files.

NOTE: Press the OK button to save and apply the configuration.

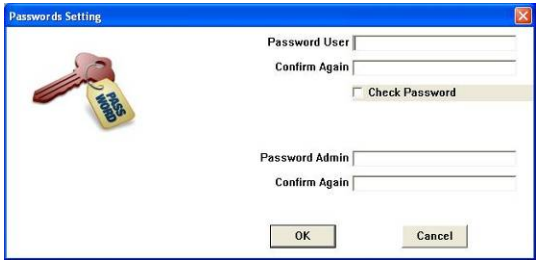
11.1.3.2 Record All Channels

Press the button to record all of the available channels according to the scheduler setting. Press the button again to stop recording.

11.1.3.3 Account Manager

Press the button to open the **Passwords Setting** window. You can set a user's password and an administrator's password.

If the **Check Password** is selected, the users must enter the passwords when login.

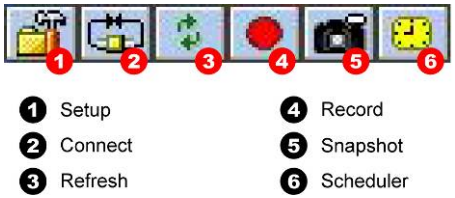


11.1.3.4 Login: Enter the passwords of User or Administrator to switch between user and administrator accounts.

11.1.3.5 Language: Select the OSD language.

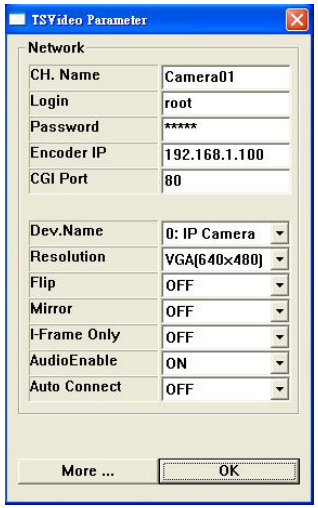
11.1.4 Camera Setup

The buttons in the bottom of each channel are the functions for current channel only.



11.1.4.1 Setup

Press the button and the **TSVideo Parameters** window will be displayed.



(1) **CH. Name**: Enter the channel name.

(2) **Login**: Enter the User ID of the camera (default login: **root)**.

(3) **Password**: Enter the password of the camera (default password: **admin**).

(4) **Encorder IP**: Enter the IP address of the camera.

(5) **CGI Port**: Enter the CGI port of the camera (default CGI port: 80).

(6) **Dev. Name**: Select the connected device (select to the IP Camera).

(7) **Resolution**: Select the resolution among 160x120/ 320x240/ 640x480/ 1280x1024.

(8) **Flip**: Vertically rotate the video.

(9) **Mirror**: Horizontally rotate the video.

(10) **I-Frame Only**: Enable/ disable the I-Frame function.

(11) **Audio Enable**: Enable/ disable the audio function.

(12) **Auto Connect**: Automatically connect to the camera when execute the program.

(13) **More…**: Directly open the build-in Web for more configurations.

NOTE: Press the OK button to save and apply the configuration.

11.1.4.2 Connect: Click the button to connect the camera directly, the image of camera will display in the preview window.

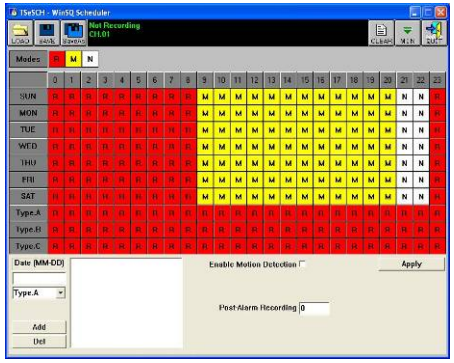
11.1.4.3 Refresh: To refresh the videos, the recording process will be stopped and restart again.

If the video is unstable after some high CPU resource programs, CPU usage may come to 100% and all the resources are taken. In that case, the system may run in slower mode than ever. Please click "Refresh" to renew the system and get it backs to higher performance.

11.1.4.4 Record: Record the current camera only.

11.1.4.5 Snapshot: Take a snapshot of live video.

11.1.4.6 Scheduler: Set the recording mode based on the weekday hour.



(1) Please click on the weekday hour block to change the recording mode or just drag the mode to the weekday hour block.

(2) **Enable Motion Detection**: Enable/ Disable the motion detection function.

(3) **Post-Alarm Recording**: Enter the recording duration (seconds) after motion is detected

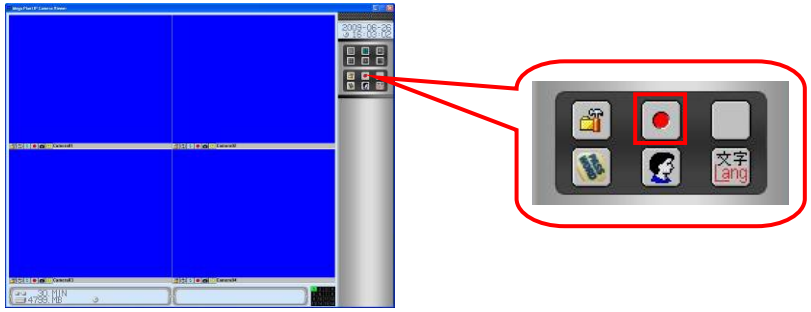
NOTE: If you want to use the motion detection recording function, be sure to enable the **Motion Detection** function and set the **Post-Alarm Recording**, and confirm the **Motion Detection** (refer to section 8.12) and the **Alarm Picture** (refer to section 8.12) have been enabled.

(4) Please save the file before exiting the setting dialog.

(5) Press the **Apply** button to update the current scheduler, and press the **SAVE** or **Save As** button to save the configuration. Press the **QUIT** button to exit.

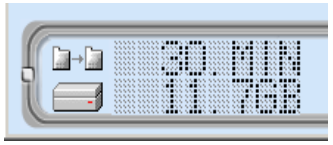
(6) Repeat the above steps to set up the other cameras.

(7) After setting, press the **Record** button on the right side of the screen to start scheduled recording.



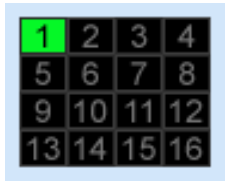
11.1.5 Hard Disk Info.

File package and disk free space amount.



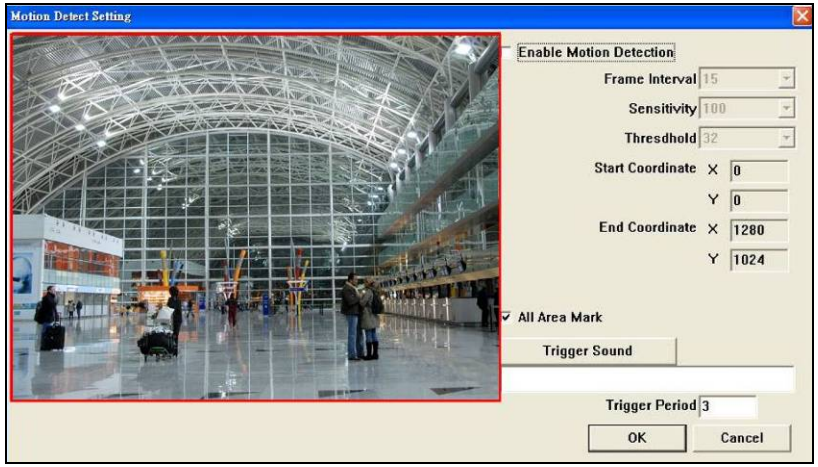
11.1.6 Channels

16 channels indicators to control the function buttons.



11.2 Motion Detect Setting

Click the right mouse button on the video of the connected camera to open the setup windows**.**

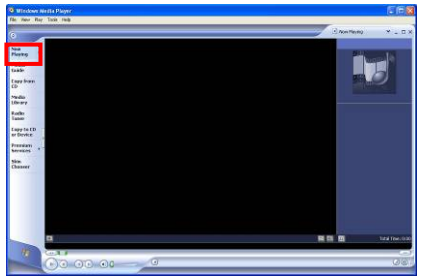


- **Enable Motion Detection:** Enable/ Disable the motion detection function.
  After enable the motion detection function, the **Frame Interval, Sensitivity** ((most sensitive) 1 >2…> 254(least sensitive)) and **Thresdhold** ((most sensitive) 1 >2…> 254(least sensitive)) items can be adjusted.
- **Set the Motion Area:** Click and hold down the right mouse button in the video window and move the mouse to select motion area.
- **Trigger Sound:** Select the alarm sound (supports WAV format).
- **Trigger Period:** Set the interval time (second) of alarm sound.

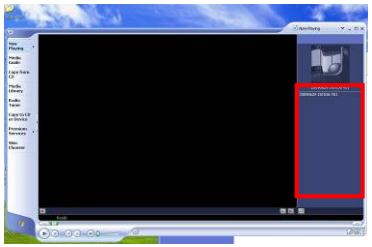
11.3 Play the Recorded Files

The recorded files can be played by Windows Media Player program.

Step1. Open the Windows Media Player and select **Now Playing.**



Step2. Drag the recorded files to the list on the right side of the window.



Step3. Simply double-click the recorded file on the list and it will begin to play.

12. Troubleshooting

Situation	Check Point
The focus is bad	1. Adjust the camera's image quality through the configuration menu. 2. Adjust by turning clockwise or counter-clockwise the focus manually.
Noisy Image	1. If the camera works in dim environment, the images might be noisy. You need more lighting.
No images available through Web browser	1. Confirm the ActiveX has been enabled. 2. Confirm the version of your Internet Explorer. If the version number lower than 5, you need to upgrade it.
Can't connect externally (can work locally)	1. This might be caused by the firewall protection. Check the internet firewall with your system administrator. 2. Refer to section 9 for more information about connecting multiple cameras to a router.
Forgot the login user name and password	1. Restore the Factory Default Settings: Press continuously the **Default** button on the rear of the camera until the **System LED** turn off. Default IP Address: **192.168.1.100** Default User Name: **root** Default Password: **admin**
Wireless network not working	1. Confirm the WLAN Setup has been set correctly refer to section 7.2 & 8.6). 2. Confirm the LAN/ WLAN switch (on the rear of camera) has been switched to Wireless mode. 3. Ensure that you wireless router supports 802.11b/g. 4. Adjust the wireless antenna for better signal reception.